

CLAIMS:

1. A combination useful for immunotherapy, where this combination has an effect on growth and/or proliferation of cells, whose growth is dependent on the interaction between a receptor and its ligand, in the receptor tyrosine kinase system (RTK), this combination includes:
 - a. - An antibody against a RTK receptor.
 - b. - A vaccine in which the active principle is the RTK receptor, and that induces antibodies against this receptor.
2. Immunotherapy combination according to claim 1 where the RTK is the EGF receptor.
3. Immunotherapy combination according to claim 2 where the vaccine is directed against the EGF receptor.
4. Immunotherapy combination according to claim 2 where the antibody against the RTK receptor is an antibody against the EGF receptor.
5. Immunotherapy combination according to claim 4 where the antibody against the RTK receptor is a humanized antibody against the EGF receptor.
6. Immunotherapy combination according to claim 5 where the humanized antibody against the EGF receptor is IOR R3.
7. A treatment combination useful for immunotherapy, where this combination has an effect on growth and/or proliferation of cells, whose growth is dependent on the interaction between a receptor and its ligand, in the system of receptor tyrosine kinases (RTK), this combination including:
 - a. - An antibody against the ligands of the RTK receptor and
 - b. - A vaccine whose active principle is (are) the RTK receptor's ligand(s) and that induces antibodies against this (those) ligand(s).
8. A therapeutic combination according to claim 7 where the RTK receptor's ligand is EGF.
9. A therapeutic combination according to claim 8 where the vaccine is composed of conjugated proteins P64K and EGF.
10. A therapeutic combination according to claim 7 where the RTK receptor ligand is TGF -alpha.

11. A therapeutic combination according to claim 10 where the vaccine is composed of conjugated proteins P64K and TGF alpha.
12. A combination useful for immunotherapy, where this combination has an effect on growth and/or proliferation of cells, whose growth is dependent on the interaction between a receptor and its ligand, in the system of receptor protein tyrosine kinases (RTK), this combination includes:
 - a. - A first agent selected from one of the antibodies against the RTK receptor and of a vaccine where the active principle is the RTK receptor that induces antibodies against this receptor, and
 - b. - A second agent selected from one of the antibodies against the ligands of the RTK receptor and of a vaccine where the active principle is this ligand, which induces antibodies against said ligand.
13. An immunotherapy combination according to claim 12, where the first agent is an antibody against the RTK receptor.
14. An immunotherapy combination according to claim 13 where the antibody against the RTK receptor is an antibody against the EGF receptor.
15. An immunotherapy combination according to claim 14 where the antibody against the EGF receptor is a monoclonal antibody.
16. An immunotherapy combination according to claim 15 where the antibody against the EGF receptor is a humanized antibody.
17. An immunotherapy combination according to claim 16 where the antibody against the EGF receptor is IOR R3.
18. An immunotherapy combination according to claim 12, where the first agent is a vaccine whose active principle is an RTK receptor.
19. An immunotherapy combination according to claim 18, where the first agent is a vaccine whose active principle is the EGF receptor.
20. An immunotherapy combination according to claim 12 where the second agent is an antibody against an RTK receptor ligand.
21. An immunotherapy combination according to claim 20 where the antibody against the RTK receptor's ligand is an antibody against EGF.
22. An immunotherapy combination according to claim 20 where the antibody against the

RTK receptor is an antibody against TGF-alpha.

23. An immunotherapy combination according to claim 12, where the second agent is a vaccine whose active principle is an RTK receptor's ligand.

24. An immunotherapy combination according to claim 23 where the vaccine contains EGF as active principle.

25. An immunotherapy combination according claim to 24 where the vaccine contains conjugated proteins p64K and EGF as active principle.

26. An immunotherapy combination according to claim 23 where the vaccine contains TGF-alpha as active principle.

27. An immunotherapy combination according to claims 1 to 26 inclusive, whose combination consists of a mixture of reagents containing independent doses of effective formulations, either of Mab or vaccines, where the combination of those independent formulations induces decreased growth of tumors that over-express EGF-R.

28. An immunotherapy combination according to claim 27, whose combination consists of a mixture of reagents containing independent doses of effective formulations, either of Mab against the EGF receptor and its ligands or of vaccines with EGF-R and its ligands (EGF, TGF alpha) as active principle, and where the combination of those independent formulations induces decreased growth of tumors that over-express EGF-R.

29. A method to control growth and/or proliferation of cells whose growth is dependent on the interaction between a receptor and its ligand, in the receptor tyrosine kinase (RTK) system, this method including the treatment with one of the therapeutic combinations defined in any one of the preceding claims.

30. A method according to claim 29 that includes the simultaneous treatment with agents against RTK receptors and their ligands.

31. A method according to claim 29 that includes the simultaneous treatment with vaccines and antibodies.

32. A method according to claim 29 that includes the treatment at the first stage with this antibody and at a second stage with this vaccine.

33. A method according to claim 29 that includes the treatment at a first stage with this vaccine and at a second stage with this antibody.

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